

Fig. 8

20 Wheel
51 Reduction mechanism
50 Motor
5 50a Encoder (traveling speed detecting means)
70 Control section
71 Pressure-sensitive sensor (leaned state detecting means)
60 Battery
80 Operation switch
10 Power off
Stop/standby
Low speed
Intermediate speed
High speed
15 80a Switch control circuit

Fig. 11

102 Remaining battery amount detection circuit
104 Information management portion
20 101 State management portion
103 Information input portion
Score information
Course information
106 Display control section
25 105 Display
109 Voice transmission control section
110 Voice synthesis portion
107 Amplifier

108 Loudspeaker
112 Panel control portion
111 Operation panel

5 Fig. 12

104 Information management portion
101 State management portion
117 Input/output control section
114 RF module
10 113 Personal digital assistant
116 USB interface
115 PC
106 Display control section
105 Display
15 109 Voice transmission control section
110 Voice synthesis portion
107 Amplifier
108 Loudspeaker
112 Panel control portion
20 111 Operation panel

Fig. 16

20 Wheel
51 Reduction mechanism
25 50 Motor
50a Encoder (traveling speed detecting means)
60 Battery
70 Control section

70e Amplifier
70d Brake means
70c Motor driver
70b Regulator
5 70a CPU
70f Memory
71 Pressure-sensitive sensor (leaned state detecting means)

Fig. 17

10 Target traveling speed

Traveling speed detected by traveling speed detecting means

Fig. 18

Maximum ON duty

15 Upper limit of ON duty

Target traveling speed

Fig. 19

S1 Initialization

20 Target traveling speed = 0

Upper limit of torque of motor = 0

S2 Detection of traveling speed started

S3 Detection of leaned state started

S4 System failure?

25 S5 Processing of stopping

S6 Current target traveling speed < Current traveling speed?

S7 Increase target traveling speed by one stage

S8 Raise upper limit of torque of motor

S9 Current target traveling speed > Current traveling speed?

S10 Lower target traveling speed by one stage

S11 Lower upper limit of torque of motor

S12 Leaned state good?

5 S13 Target traveling speed = 0?